

WHAT IS CLAIMED IS:

1. A method for manufacturing workpieces treated in vacuum comprising:

providing a first vacuum chamber connected with a first vacuum pump;

providing a second vacuum chamber;

providing a second vacuum pump dischargeable into atmosphere for producing a vacuum in both the first and second vacuum chambers;

providing a first valve for connecting said second vacuum pump with the first vacuum chamber via the first vacuum pump;

providing a second valve for connecting the second vacuum pump with the second vacuum chamber;

closing the first valve and opening the second valve for evacuating the second vacuum chamber; and

processing a workpiece in the first vacuum chamber.

2. The method of claim 1, further comprising the step of closing the second valve after evacuation of the second vacuum chamber and opening the first valve for evacuation of the said first vacuum chamber.

3. The method of claim 1, wherein said first pump is a turbo-vacuum pump.

4. The method of claim 1, wherein said second pump is a single or multistage rotary valve or membrane pump.

5. The method of claim 1, wherein said vacuum treated workpiece is a disc-shaped workpiece.

6. The method of claim 1, wherein said vacuum treated workpiece is an optical storage disc, said treatment comprising coating.

7. The method of claim 1, further comprising the step of introducing at least one of said workpiece in one of said first and second vacuum chambers and removing said workpiece from one of said first and second vacuum chambers after said treating, the time-span between said introducing and said removing being no more than 2 seconds.

8. A method for manufacturing a workpiece treated in vacuum comprising:

providing a first vacuum chamber connected with a first vacuum pump;

providing a second vacuum chamber;

transporting a workpiece to the first chamber;

providing a second vacuum pump dischargeable into atmosphere for producing a vacuum in both the first and second vacuum chambers;

providing a first valve for connecting said second vacuum pump with the first vacuum chamber via the first vacuum pump;

providing a second valve for connecting the second vacuum pump with the second vacuum chamber;

closing the first valve and opening the second valve for evacuating the second vacuum chamber; and

treating the workpiece in the first vacuum chamber.

9. The method of claim 8, wherein the workpiece is a disc-shaped workpiece, the method including providing the second chamber to be an interlock chamber and providing a lock valve between the first and second chambers for connecting the chambers to each other and for passage of the workpiece between the chambers, the workpiece being transported from the second chamber to the first chamber before the treating step.

10. The method of claim 9, including closing the second valve and opening the first valve for evacuating the first chamber, a total time for transporting and treating the workpiece being at least 50% of a total cycle time for evacuating the first and second chambers plus the time for transporting and treating the workpiece.

11. The method of claim 8, including closing the second valve and opening the first valve for evacuating the first chamber, a total time for transporting and treating the workpiece being at least 50% of a total cycle time for evacuating the first and second chambers plus the time for transporting and treating the workpiece.

12. A method for manufacturing a workpiece treated in vacuum comprising:

- providing a first vacuum chamber connected with a first vacuum pump;

- providing a second vacuum chamber;

providing a second vacuum pump dischargeable into atmosphere for producing a vacuum in both the first and second vacuum chambers;

providing a switch-over unit having a first position for connecting said second vacuum pump with the first vacuum chamber via the first vacuum pump, and a second position for connecting the second vacuum pump with the second vacuum chamber;

moving the switch-over unit to the first position for evacuating the first vacuum chamber;

moving the switch-over unit to the second position for evacuating the second vacuum chamber; and

processing a workpiece in the first vacuum chamber.

13. The method of claim 12, wherein the workpiece is a disc-shaped workpiece, the method including providing the second chamber to be an interlock chamber and providing a lock valve between the first and second chambers for connecting the chambers to each other and for passage of the workpiece between the chambers, the method including transported the workpiece from the second chamber to the first chamber before the treating step.

14. The method of claim 13, wherein a total time for transporting and treating the workpiece is at least 50% of a total cycle time for evacuating the first and second chambers plus a time for transporting and treating the workpiece.

15. The method of claim 12, wherein a total time for

transporting and treating the workpiece is at least 50% of a total cycle time for evacuating the first and second chambers plus a time for transporting and treating the workpiece.